

CLAIMS

1. A spray nozzle (11) consisting of a body (12) defining an axial cavity and having, at one of its ends, an inlet orifice (34) for liquid to be sprayed and, at the other end, a spray orifice (13), said nozzle (11) comprising, housed in its cavity, from upstream to downstream with reference to the direction of flow X-X' of the liquid, a disk (33) having an axial passage (35) for calibrating the flow of liquid, this passage communicating with said inlet orifice (34), a "divergent" component (19; 50; 60a-60d; 70a-70f) whose geometry is designed to divide the flow of liquid into small streams and set them in rotation, and a "convergent" component (16; 16b-16d) having an axial passage (17; 17b-17d) which communicates with said spray orifice (13) and whose geometry is designed to gather said small streams together into a single jet and to assist in obtaining the desired spraying angle, said calibration disk (33) being secured to a plug (21; 41; 51) fitted hermetically into the cavity in the nozzle body (12), and said convergent part (16; 16b-16d) being secured to said nozzle body (12),

characterized in that said plug (21; 41; 51) includes at least one grab region (22) protruding from said nozzle body (12) and in that said divergent part (19; 50; 60a-60d; 70a-70f) is an independent component immobilized in the cavity in said nozzle body (12) at a level such that a chamber (32) is formed between said divergent part (19; 50; 60a-60d; 70a-70f) and said convergent part (16; 16b-16d).

2. Nozzle according to claim 1, characterized in that said divergent part (19; 50; 60a-60d; 70a-70f) is immobilized in the cavity in the nozzle body (12), on the downstream side, by simply bearing against a suitably profiled region (14) of the wall of said cavity and, on the upstream side, by said plug (21; 41; 51).

3. The nozzle as claimed in claim 1 or 2, characterized in that said suitably profiled region is in

(80) which is formed in a convex shape and whose axis of symmetry is perpendicular to that of said duct.

12. The spray nozzle as claimed in any one of the preceding claims, characterized in that said plug (41; 51) has, downstream of said calibration disk (33), transverse air inlet passages (44) designed to come into alignment with air access orifices (45) formed in the nozzle body (12) and opening out level with a convergent-divergent passage (43), so as to create a venturi (42).

10 13. The nozzle as claimed in any one of the preceding claims, characterized in that the divergent part (19; 50; 60a-60d; 70a-70f) has a diameter which takes up between 5 and 10 mm.

15 14. The nozzle as claimed in any one of the preceding claims, characterized in that its length is between 11 and 25 mm, and is preferably 18 mm.

20 15. A spray kit comprising a nozzle as claimed in any one of claims 1 to 14 and one or more additional divergent parts (19; 50; 60a-60d; 70a-70f) which differ from that included in the nozzle in terms of the number of passages (20; 61a-61d) and/or the diameter of the passages (20; 61a-61d) and/or the geometry of the passages (20; 61a-61d).

25 16. The use of a nozzle as claimed in any one of claims 1 to 14, or of a kit as claimed in claim 15, in an agricultural spray device.